

# **THE USE OF MANAGEMENT ACCOUNTING PRACTICES IN MALAYSIAN SMES**

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## **ABSTRACT**

There have been the recent calls for additional research in order to enhance the understanding of the adoption of management accounting practices (MAPs) in small and medium sized enterprises (SMEs). This, allied to an increasing importance of SMEs around the world especially in developing countries, is the motivation for this research. This research explores the uptake of a broad range of MAPs in Malaysian SMEs; identifies the roles of MAPs in the management of SMEs; determines factors that affect the extent of use of MAPs in SMEs and lastly examines the relationship between the use of MAPs and organizational performance of SMEs. A postal questionnaire was conducted to 1,000 Malaysian SMEs in manufacturing sector which elicited 160 useable responses.

The results show that the majority of respondents have used the five management accounting areas identified. Use of the costing system, budgeting system and performance evaluation system are significantly higher than for the decision support system and strategic management accounting, which indicates that the uptake of traditional MAPs is greater than for sophisticated MAPs. The results indicate that medium sized firms make greater use of all MAPs as opposed to small sized enterprises. The most significant differences relate to the use of decision support system and strategic management accounting. The increased uptake of sophisticated MAPs by larger firms is in line with size being a contingent variable explaining the use of such practices.

The results also suggest that MAPs were perceived as playing very important roles in the management of Malaysian SMEs. Performance evaluation and controlling activities were the major roles of MAPs in the management of SMEs. Overall the study suggests

that MAPs are perceived by SMEs as relevant and useful in their management processes.

Further, the study found that four out of five contingent factors; size of the firm, intensity of market competition; participation of the owner/manager in the development of MAPs in firm and advanced manufacturing technology have a positive and statistically significant relationship with the use of certain MAPs. The research however found weak support for the positive relationship between the use of MAPs and organizational performance of SMEs.

This study enriches the existing body of knowledge of management accounting by providing information as to the use of MAPs in SMEs in Malaysia. The findings can be specifically informative for policy makers intent on developing management accounting skills among Malaysian SMEs. This research will provide valuable insights into the nature of MAPs in SMEs in a developing country and will promote interest among Malaysian researchers as well as researchers of other countries to make the SME sector a focus of interest in management accounting research.

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### **ABBREVIATIONS**

ABC	Activity-based Costing
ABCMA	Activity-based Costing and Management
ABMA	Activity-based Management Accounting
AIS	Accounting Information System
AMT	Advanced Manufacturing Technology
ARR	Accounting Rate of Return
BBRT	Beyond Budgeting Round Table
BSC	Balanced Scorecard
CAM-I	Consortium for Advanced Manufacturing International
CBM	Central Bank of Malaysia
CIMA	The Chartered Institute of Management Accountants
CSFs	Critical Success Factors
CVP	Cost-Volume-Profit
DOS	The Department of Statistics
DSS	Decision Support System
FDI	Foreign Direct Investment
FMAC	Financial Management and Management Accounting Committee
GDP	Gross Domestic Product
IRR	Internal Rate of Return
IFAC	International Federation of Accountants
IMA	Institute of Management Accountants
IMP	Industrial Master Plan
IT	Information Technology
JIT	Just-In-Time
KM	Knowledge Management
KPIs	Key Performance Indicators
MA	Management Accounting
MAP	Management Accounting Practice
MAS	Management Accounting Systems
MAT	Management Accounting Technique
MCS	Management Control System
MOA	Ministry of Agriculture and Agro-based Industries
MP	Malaysia Plan
NPC	National Productivity Corporation (Malaysia)
NPV	Net Present Value
NSDC	Malaysian National SMEs Development Council
NZ	New Zealand
OC	Organizational Controls
PMS	Performance Measurement System
ROI	Return on Investment
ROE	Return on Equity

ROA	Return on Asset
ROS	Return on Sales
SMEs	Small and Medium sized Enterprises
SMIDEC	Small and Medium Industries Development Corporation
SMA	Strategic Management Accounting
TQC	Total Quality Control
TPM	Total Productive Maintenance
TQM	Total Quality Management
UNDP	The United Nations Development Program
UK	United Kingdom
US	United States
VBM	Value-based Management
VE	Value Engineering
ZBB	Zero-Based Budgeting

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## **Chapter 1**

### **Introduction**

#### **1.1 Introduction**

This chapter is organized into five sections. The first section describes briefly the background to small and medium sized enterprises (SMEs) and the role of management accounting practices (MAPs) in the management of all organizations. Section two discusses the problem statement followed by the identification of research objectives, research questions, and hypotheses. Next the rationale and importance of this study is explained. The section ends with the development of a methodology and the specification of the organisation of the thesis.

#### **1.2 Background**

Small and medium-sized enterprises (SMEs) make up the vast majority of the business population in most countries in the world therefore they constitute a vital force in modern information-based economies (Mitchell and Reid, 2000). In Malaysia the SMEs population comprises approximately 99 per cent of all Malaysian businesses (The Department of Statistics, 2005). Therefore this sector plays a crucial role in the economy as an engine to generate economic growth in Malaysia. SMEs also contribute to the economy in other ways. Cook (2001) highlighted some of those which includes;

- the encouragement of entrepreneurship;
- the greater likelihood that SMEs will utilize labor intensive technologies and thus have immediate impact on employment generation;
- the fact that they can usually be established rapidly and put into operation to produce quick returns;

- the ability of SME development to encourage the process of both inter-and intra-regional decentralization; and
- the notion that they may become a countervailing force against the economic power of larger enterprises. More generally, the development of SMEs is seen as accelerating the achievement of wider economic and socio-objectives, including poverty alleviation.

In addition to the advantages stated above, Mitchell and Reid (2000) argued that part of the reason for stressing the importance of small firms or SMEs is that their flexibility makes them well suited to the niche opportunities which are so characteristic of the 'new' economy. Thus SMEs play a key role in stimulating economic expansion. In light of both their significant contributions and potentials, there is a growing focus on this sector by policy makers in most countries. In Malaysia, the role of SMEs became more important after the 1990s especially after the Asian Crisis in 1997-1998. The country learnt not to be overly dependent on foreign direct investment (FDI) in stimulating its economy and used SMEs as a new mechanism for generating the growth of its economy (Aris, 2007). The government has been called upon to put up clear policies, strategies and implementation matrixes to develop this sector through an integrated approach (Aris, 2007). For example in the 9th Malaysia Plan (2006 – 2010), the principal SMEs policy strives for the development of a competitive, innovative and technologically strong SME sector, capable of meeting the increasing demands of globalization and intensifying competition (NSDC, 2007). In consequence various initiatives have been set in motion to build the capacity and capability of SMEs. For example, there have been efforts to improve the management and business methods in production, quality improvement, marketing and accounting skill (SME Annual Report, 2007). However there is concern about a lack of exposure to management accounting among Malaysian SMEs since there is no specific reference to the use of MAPs. Previous research has



suggested that MAPs are an important tool through which management can promote efficiency, and potentially have an important influence on performance (see Ghosh and Chan, 1997; Lybaert, 1998; and Mitchell and Reid, 2000). In particular, within small firms, MAPs act as the key information system that plays a vital role as an efficient information-processing (Reid and Smith, 2002). Apart from that, the availability of financial and non-financial information provided by MAPs permits firms to effectively face competition in the market, coping with change, surviving and thereby improves performance (Mia and Clarke 1999 and Reid and Smith, 2002). Although good MAPs may not by themselves guarantee success, an absence of them or poorly implemented practices may significantly reduce the firm's competitive advantages (Folk et al., 2002). Therefore, given these advantages from MAP use, it is important to promote knowledge and awareness of MAPs among small business in Malaysia so that the firms may benefit advantages that have been highlighted above.

### **1.3 Problem statement**

Much has been written about small business and in particular about small business failure rates (Watson and Everett, 1996). Richard (2000) stated that there are many reasons for the failure rate of start-up businesses, including lack of adequate working capital, poor market selection, and rapidly changing external market conditions. However, the most significant reason for this high failure rate is the inability of SMEs to make adequate use of essential business and management practices. Many small firms fail to develop an initial plan, and those that do establish a plan fail to continually adjust and use it as a benchmarking tool. Similarly, Wichmann (1983) argued that one of the reasons for business failure is poor management ability which includes accounting problem-solving. Further, Hopper et al. (1999) using data based on the results from Japanese companies' concluded that a failure to adopt MAPs (i.e. cost

management systems) in a similar way to their larger counterparts and, at the margins, to experiment with new forms of control that are more profit oriented may be a factor in the currently high failure rate of SMEs. Based on these argument it can be suggested that MAPs are important for SMEs if they are to avoid failing.

Another driver of this thesis is the paucity of research into the use of MAPs among SMEs. Despite the increasing amount of research in management accounting in the past decade, little is known of its form and effectiveness within SMEs (McChlery et al., 2004). This lack of research based knowledge may have been based on a belief that the discipline in management accounting is best served by studying the most innovative and successful examples of practice that can be found in the leading western and Japanese firms (Mitchell et al., 1998). Consequently larger enterprises have been preferred for empirical management accounting research as expertise and a capacity to innovate and develop management accounting is more likely to exist in such enterprises (Mitchell and Reid, 2000). This situation creates a challenge into the study of MAPs in SMEs. However, Mitchell et al. (1998) contended that research into management accounting in SMEs provides possibilities of a different type which are nonetheless of great importance to the fundamental explanation and understanding of the discipline. Indeed, many of the research opportunities inherent in SMEs derive directly from the contrasts which they provide with large organisations. Mitchell et al. (1998) added that in the SME research setting all of the following advantages accrue.

1. The small size of the SME provides a less complex research setting than that provided by a large scale organisation. In the SME the nature, role and development of management accounting are more visible to the researcher and due to their smaller scale, more accessible. This enhanced visibility, combined with the

susceptibility of the SME to key contingencies such as phase of the business cycle and extreme financial and competitive pressures, provides an environment in which the effects of fundamental forces are marked and can therefore be studied more easily.

2. Prior research, e.g. Holmes and Nicholls (1989) in an Australian context, indicates that management accounting information (and its absence) is associated with success (and failure) in SMEs and is therefore potentially an important influence on performance within this economic sector. This, in combination with the relative importance of SMEs as generators of economic well-being reinforces the significance of this area of research.
3. In new and young SMEs the birth and early years of management accounting systems are observable. The existing research focusing on these formative stages concentrates mostly on the development of management control systems (MCS) in which only a few control systems are associated with management accounting (see for example Sweeting, 1991; Davila, 2005; Davila and Foster, 2007; Wisbaden and Sandino, 2007; and Hutzschenreuter, 2009). Hence there is a dearth of research material that specifically focuses on management accounting at these stages have been undertaken.
4. The absence, in many instances, of professional accounting support in the SMEs results in information provision which is derived purely from managerial demand. The 'producer' driven influence of the accountant is absent from the subject of study and consequently the SME setting provides a unique and pure insight into managerial information needs.

For these reasons SMEs offer a potentially rewarding location for investigating MAPs and exploring the factors underlying their development. At present in Malaysia there is a dearth of information on the extent of use of MAPs among SMEs. Given their small

size especially in the context of developing country, there is a possibility that SMEs do not use MAPs and fail to take full advantage of the opportunities that better accounting information might create. Also despite the claims of an association by many researchers, there is little information on whether or not there is any association between the use or extent of use of MAPs and the performance of firms, especially for Malaysian SMEs. The absence of data on MAPs in SMEs has perhaps prevented the Malaysian regulators/policy makers from taking actions that might improve the functioning of Malaysian SMEs. Consequently, there are significant gaps in the knowledge base relating to MAP usage in SMEs in Malaysia, which should be filled on the grounds that the information provided may underpin government policy towards the sector.

Therefore given the significant economic importance of SMEs and the gap in the literature, this research aims to obtain a broad overview of the use of MAPs within Malaysian SMEs, their roles in the management of SMEs, and to examine both the factors that lead to their use as well as their impact on performance. Following are the research objectives, research questions and research hypotheses developed for this study.

#### **1.4 Research objectives**

Based on the issues and problems discussed above, this study identifies four main objectives

1. To investigate the extent to which MAPs are employed by Malaysian SMEs.
2. To identify the roles played by MAPs in Malaysian SMEs' management.
3. To determine the factors that affect the extent of use of MAPs among Malaysian SMEs.

4. To seek to demonstrate a positive relationship between MAP use and the performance of SMEs.

### **1.5 Research questions**

These objectives can be expressed in the following research questions:

1. What is the extent of the use of MAPs by Malaysian SMEs?
2. What are the roles of management accounting in Malaysian SMEs' management?
3. What factors affect the extent of the use of MAPs by Malaysian SMEs?
4. Is there a positive relationship between the use of MAPs and the performance of Malaysian SMEs?

### **1.6 Hypotheses**

Research questions 3 and 4 can be expressed in terms of the following two general hypotheses for empirical testing:

*H1: There are significant and positive relationships between selected contingent factors and the use of MAPs.*

*H2: There is a significant and positive relationship between the use of MAPs and organizational performance.*

### **1.7 Importance of the study**

This study will have useful implications for theory and practice. Regarding the potential implications for theory, the study will expand the existing management accounting literature in two main ways. First the study will provide new empirical evidence on the use of MAPs. Second, the study will contribute an additional study in the new context of Malaysian SMEs regarding what contingent factors affect the extent of MAP use.

Finally, the research will test for a relationship between the use of MAPs and the performance in the context of Malaysian SMEs. The focus on Malaysia is especially important because research on MAPs and SMEs is very limited in this country and developing countries more generally. Benefits for practice will include the following:

- the creation of an awareness among SME managers of the importance of management accounting as a means of improving performance and maintaining competitiveness in the marketplace.
- the provision of results that may assist policymakers, such as the level of use of MAPs among SMEs and factors that affect the use of MAPs, that may ensure that future policy decisions made by the Malaysian government, financial institutions, and other groups with an interest in SMEs are evidence based.

## **1.8 Research methodology**

The quantitative data for descriptive purposes and empirical testing will be collected by a postal questionnaire. The questionnaire will examine and explore the state of MAPs within Malaysian SMEs in the manufacturing sector. The research concentrates only on one sector in order to avoid inappropriate distractions arising out of variations between sectors. Besides that the manufacturing sector in Malaysia plays a significant role in the Malaysian economy and therefore it is worthwhile to focus on this sector as a target population for this study. In addition the questionnaire will also explore the roles of MAPs as well as the factors that influence their use among SMEs. Lastly questions on the level of performance of SMEs and details of the profile of the firms will also be included. A postal questionnaire approach has been widely used in management accounting research (see for example, Drury et al., 1993; Firth, 1996; Chenhall and Langfield-Smith, 1998; Haldma and Laats, 2002; and Al-Omiri, 2003).

The information on the membership of the population will be derived from the directory of the Federation of Malaysian Manufacturers (FMM). This source, although not comprehensive, provides detailed information about SMEs in the manufacturing sector. This directory consists of comprehensive profiles of over 2,200 manufacturers from SMEs to large enterprises. For the sampling purposes, this research will focus on the small and medium category as the sampling unit. Thus in order to ensure every sub-sample gets an appropriate representation, a stratified random sampling procedure is used. This research will expect to receive between 120 to 150 responses from the 1,000 sample. This is based on past response rates in Malaysian studies. A detailed specification of the methodology is provided in Chapter 5.

### 1.8.1 Research process

Figure 1.1 shows the steps that will be employed in addressing the research problems.

Figure 1.1 Overview of research process

<b>STEP 1</b>	Literature review
<b>STEP 2</b>	Identification of possible variables Development of survey questionnaire
<b>STEP 3</b>	Pilot testing - Postal questionnaire Approximately 2 months
<b>STEP 4</b>	Actual survey- postal questionnaire Approximately 4 months
<b>STEP 5</b>	Data analysis

The first step in the research process will be a literature search to ascertain the current state of knowledge in the field and ultimately to identify the relevant research design

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